# Hardik Prakash

Portfolio: hardikprakash-dev.vercel.app
LinkedIn: linkedin.com/in/hardik-prakash
Email: hardikprakash.official@gmail.com
GitHub: github.com/hardikprakash
Mobile: +91-8130841139

## Education

- **Dr. A.P.J Abdul Kalam Technical University** — Lucknow, India
  *B.Tech - Computer Science and Artificial Intelligence; GPA: 7.02* — *Nov 2021 - July 2025*
- **CBSE** — Delhi, India
  *Higher Secondary Education (12th Grade); GPA: 9.12* — *Apr 2020 - Apr 2021*
- **CBSE** — Delhi, India
  *Secondary Education (10th Grade); GPA: 9.08* — *Apr 2018 - Apr 2019*

## Skills Summary

- **Languages**: Python, SQL, C, JavaScript, TypeScript
- **Frameworks**: FastAPI, Flask, Streamlit, React, Next.js, Astro, TailwindCSS
- **Libraries & Tools**: Scikit-learn, Pandas, NumPy, Seaborn, SpaCy, TensorFlow, Hugging Face
- **Platforms**: Docker, Git, Azure, Prisma, NextAuth.js
- **Databases**: PostgreSQL, SQLite

## Experience

- **NeGD, Digital India Corporation, MeitY** — Feb 2025 – Apr 2025
  *Data Analyst Intern* — *Delhi, India*
  - **User Sentiment Analysis**: Analyzed over 5,000 user reviews from Android/iOS platforms to extract key pain points and sentiment trends, improving UX feedback visibility. Used TF-IDF and BERT embeddings to cluster common issues.
  - **LLM-Driven Text Mining**: Developed a semi-automated text classification pipeline using self-hosted LLMs, NLTK, and Scikit-learn; reduced manual tagging efforts by 60%.
  - **Time-Series Forecasting**: Built PROPHET-based models to forecast user growth across 8+ app categories, informing product strategy for upcoming quarters.
- **Futuresoft (INDIA) Pvt. Ltd.** — June 2024 – Jan 2025
  *Software Engineer Intern* — *Remote*
  - **AI-Powered Surveillance System**: Engineered a real-time forest surveillance system using YOLOv8 for object detection and FastAPI for live stream integration, reducing detection latency to under 2s.
  - **Dashboards for Visual Monitoring**: Developed a React + Tailwind CSS dashboard to display surveillance footage, log alerts, and enable interactive exploration of detection logs.
  - **Power Forecasting Models**: Trained Scikit-learn regression models to predict power consumption with 92% accuracy, visualized using Seaborn. Integrated API endpoints for real-time analytics.

## Projects

- **Upskillr – LLM-Powered Career Skill Recommender**: Built an AI assistant that analyzes PDF resumes and recommends personalized skills using a **Retrieval-Augmented Generation (RAG)** pipeline. Extracted structured profile data using LLMs, retrieved relevant job listings from a **ChromaDB** vector store, and generated targeted upskilling suggestions. Processed 15+ resumes in testing.
  **Stack:** FastAPI, Streamlit, ChromaDB, Hugging Face Transformers, PyMuPDF, Azure VMs
  **Links:** GitHub, Live Demo
- **End-to-End Topic Modeling Pipeline**: Developed a scalable NLP pipeline to uncover latent topics from unstructured text using **LDA** and **BERTopic**. Enabled interactive visualization and analysis through a **Streamlit** interface. Applied on datasets with over 10,000 documents.
  **Stack:** BERTopic, Gensim, Pandas, SpaCy, Streamlit
  **Links:** GitHub, Live Demo
- **DevTracker – Full-Stack Developer Productivity Platform (WIP)**: Building a full-stack app for project tracking and productivity management. Supports **JWT-authenticated** users, project/task management via a **Kanban board**, daily markdown logs, and analytics visualizations. Designed for individual devs and small teams.
  **Stack:** Next.js, NeonDB, Tailwind CSS, JWT
- **Image Classification using CNNs (Intel Image Dataset)**: Trained two **CNNs** on Intel's image dataset—one for binary terrain classification and one for full 6-class output. Used **Keras Functional API**, **EarlyStopping**, and custom F1-score callbacks. Achieved 85–92% validation accuracy; models hosted on Hugging Face.
  **Stack:** Keras, TensorFlow, NumPy
  **Links:** Hugging Face

## Certifications

- **Deep Learning Specialization – Deeplearning.ai**: Neural Networks, CNNs, Sequence Models, Hyperparameter Tuning, Structuring ML Projects
- **Microsoft Certified**: Azure Fundamentals, Azure Data Fundamentals

## Interests

Self-hosting tech, Exploring LLMs, Offline-first tools, Music composition